

Fig. 1

09880638-051301

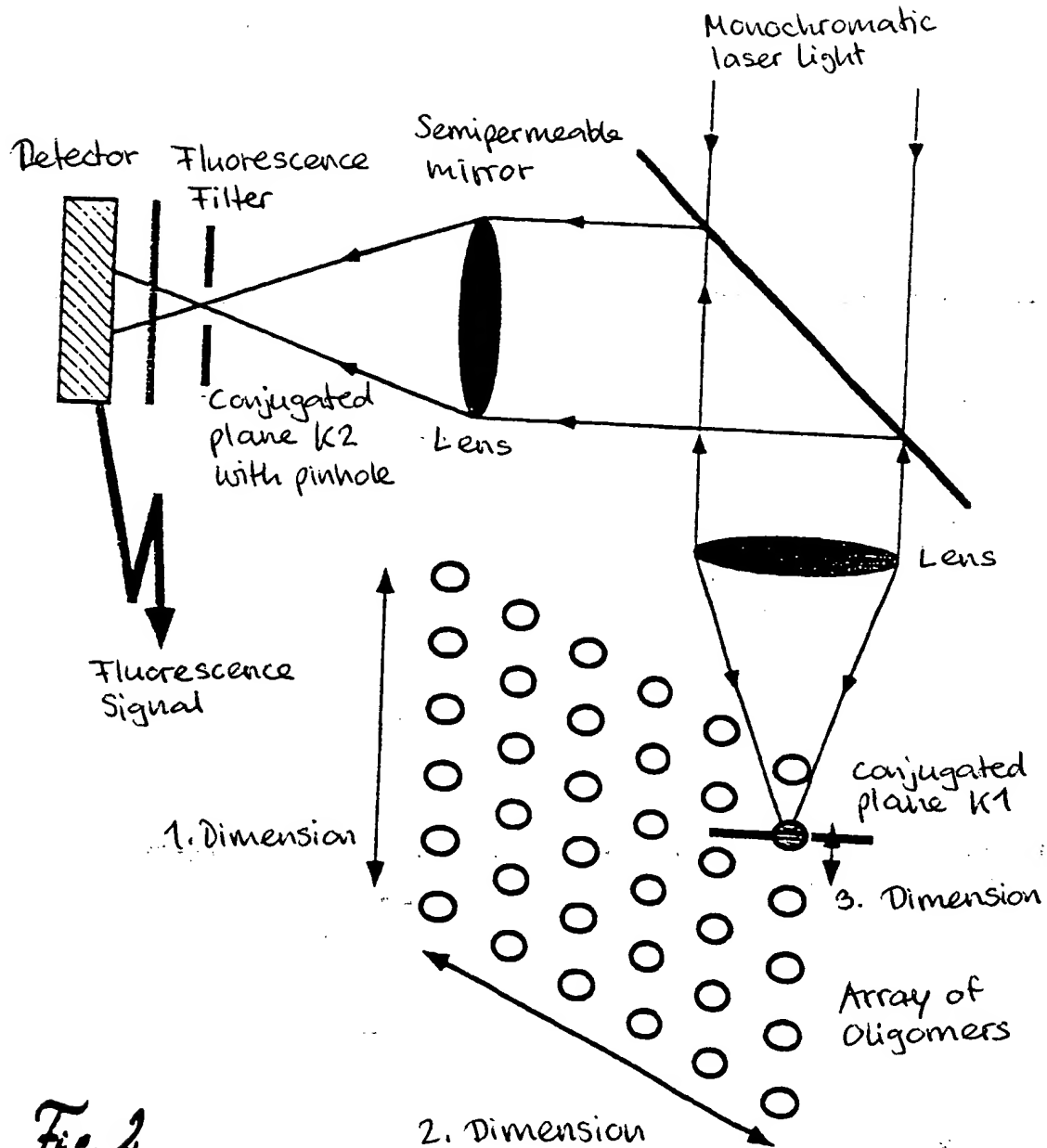


Fig. 2

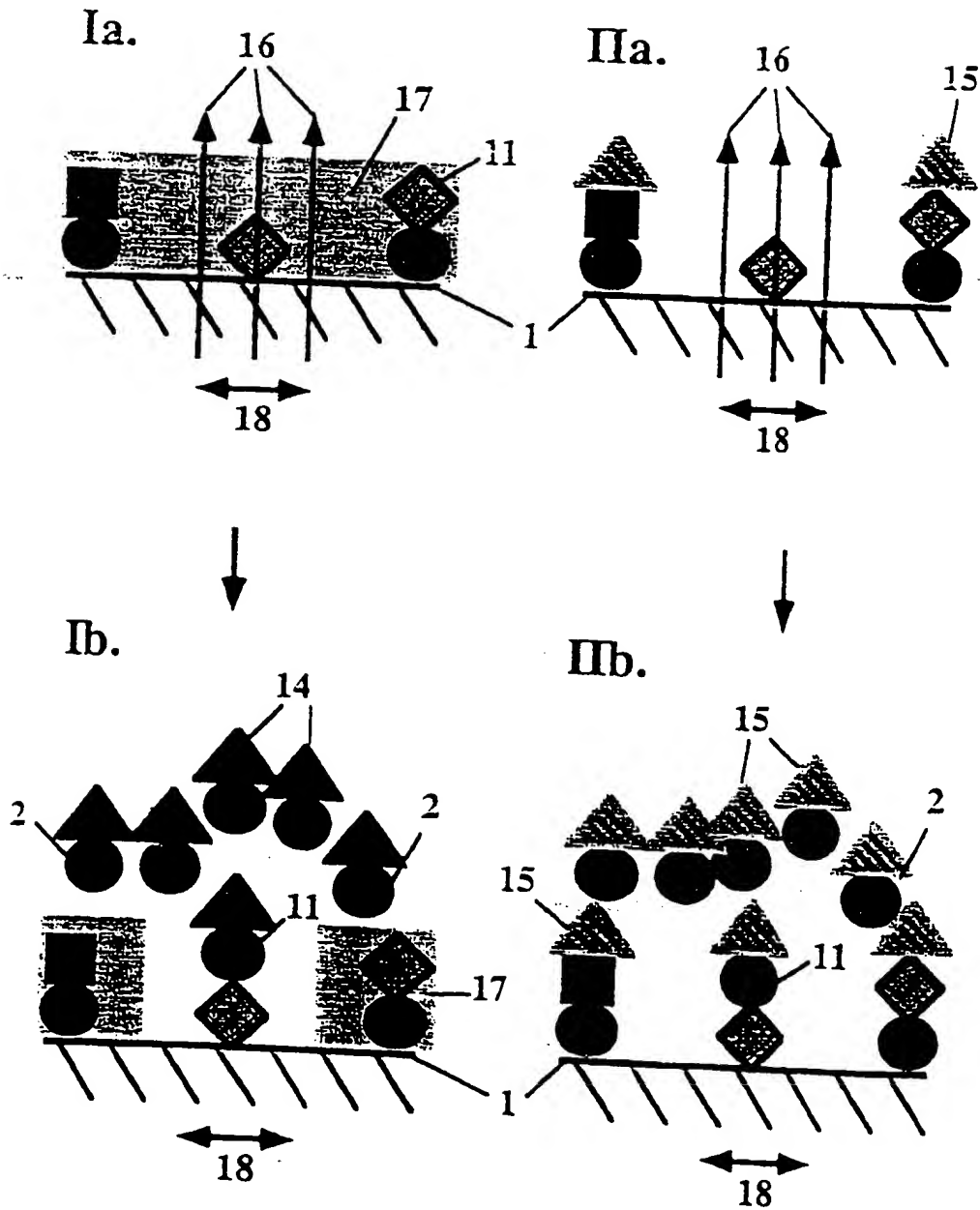


Fig. 3

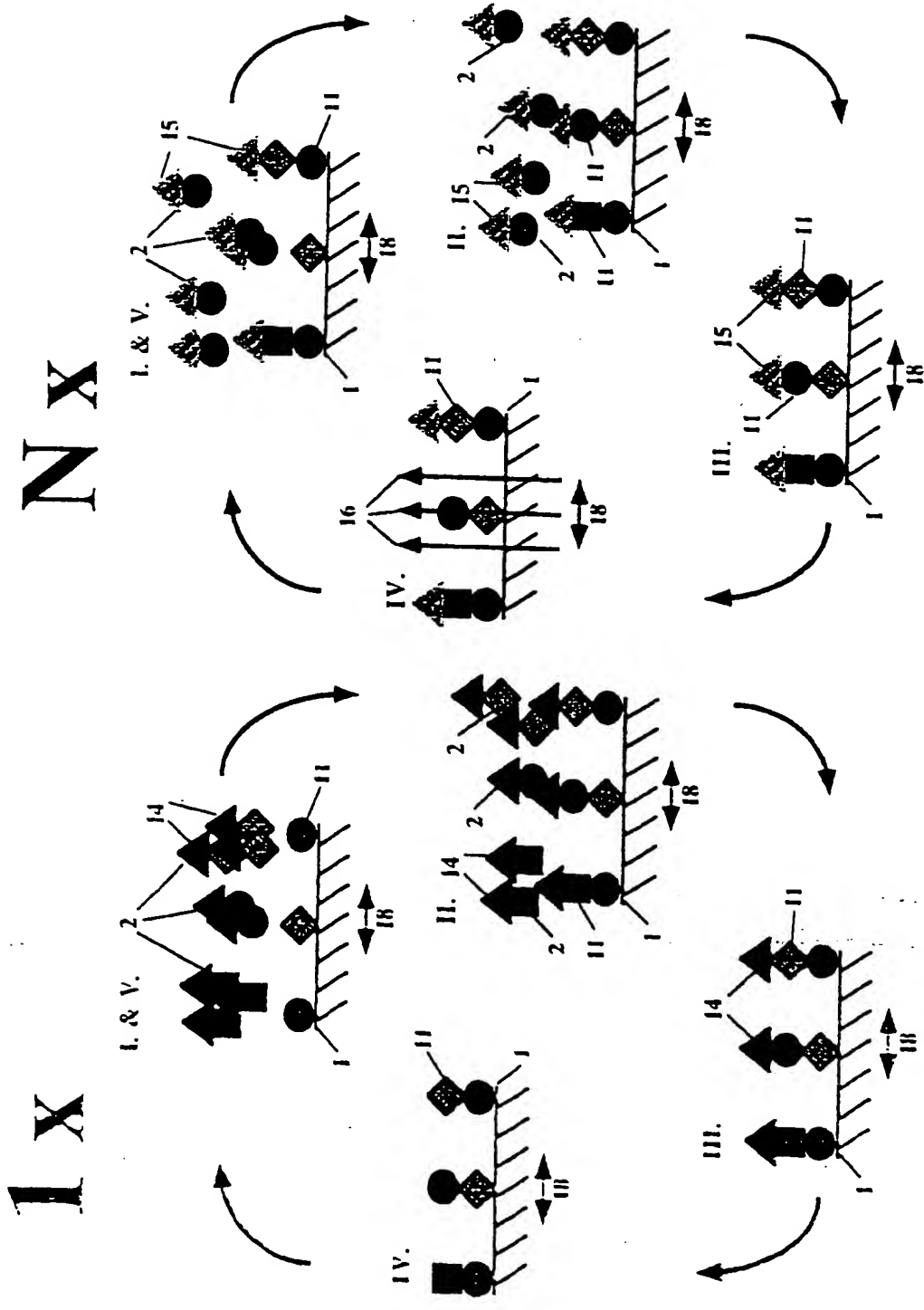


Fig. 4

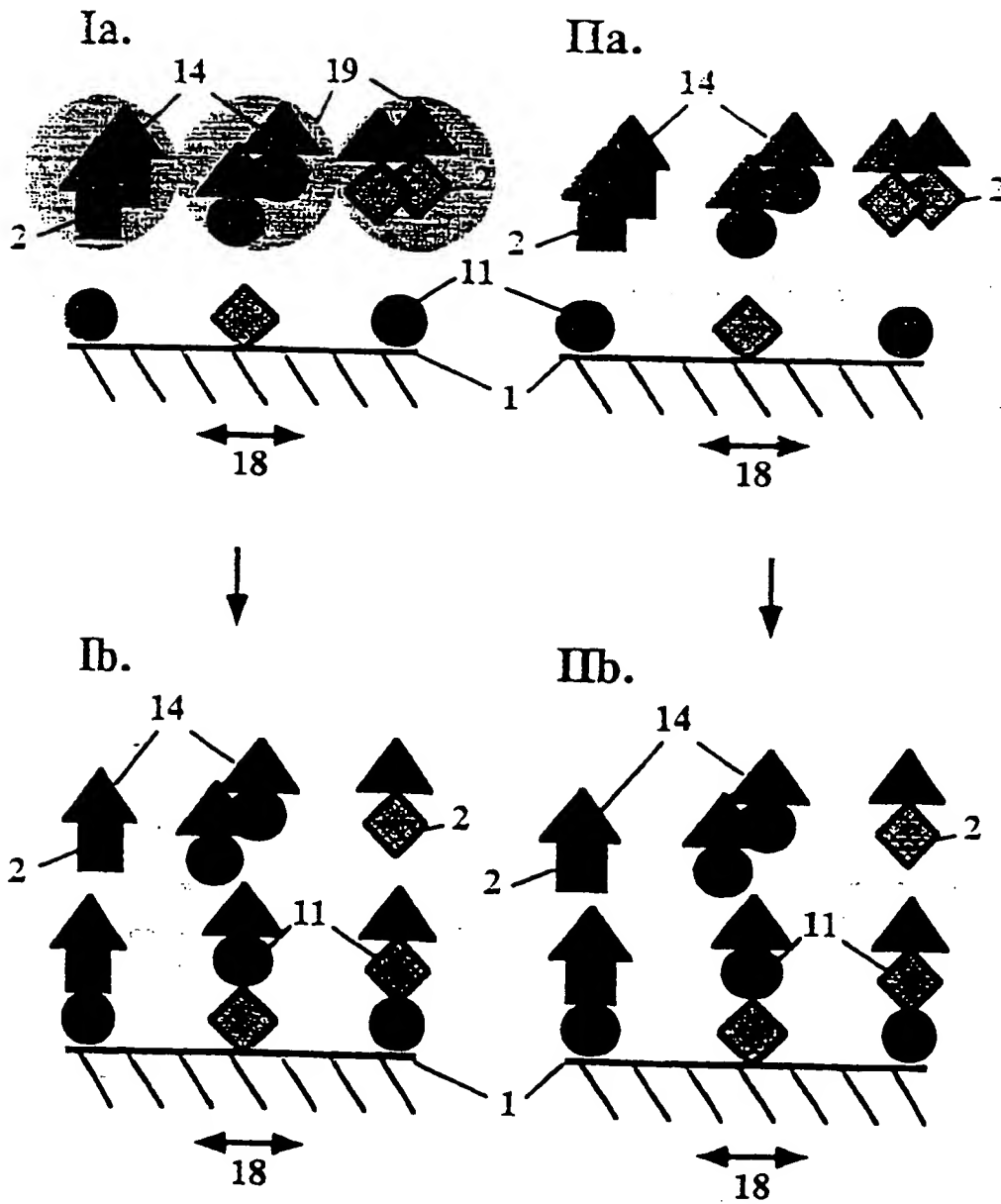
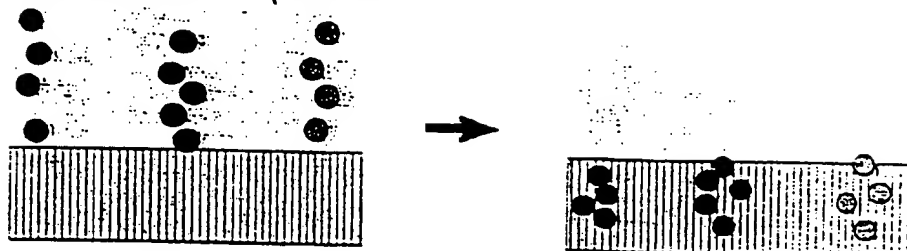


Fig. 5

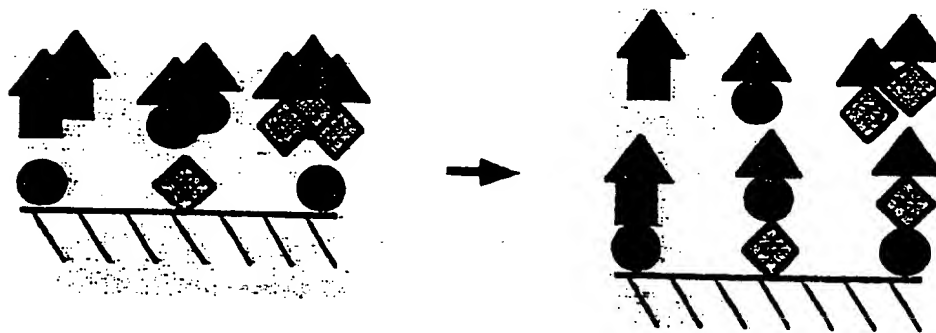
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Demand on spotting of color



- Low diffusion rate of the large chromophores
- Rapidly evaporating solvent
- Absorbent paper

Demand on spotting of monomers for the combinatorial synthesis



- High diffusion rate of small monomers
- Very slowly evaporating solvent

Fig. 6

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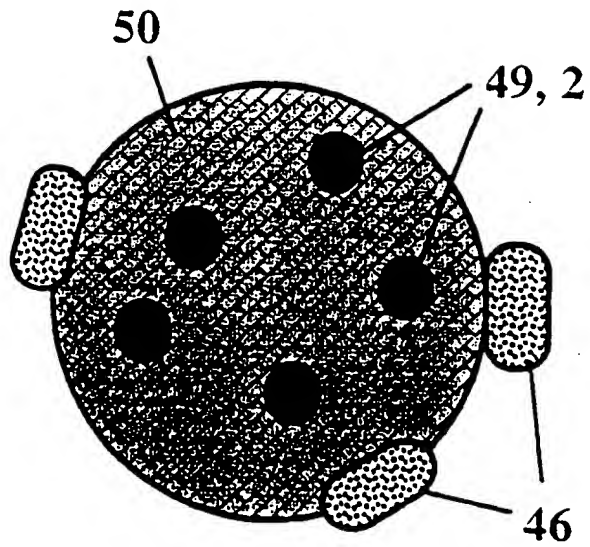
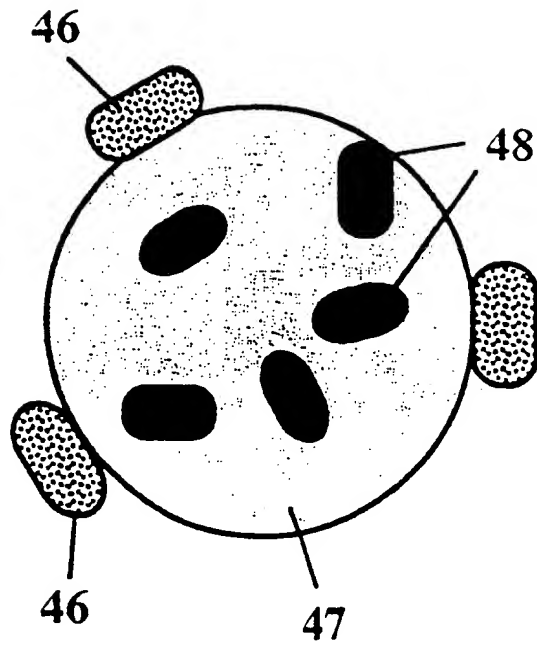


Fig. 7

09880688-061301

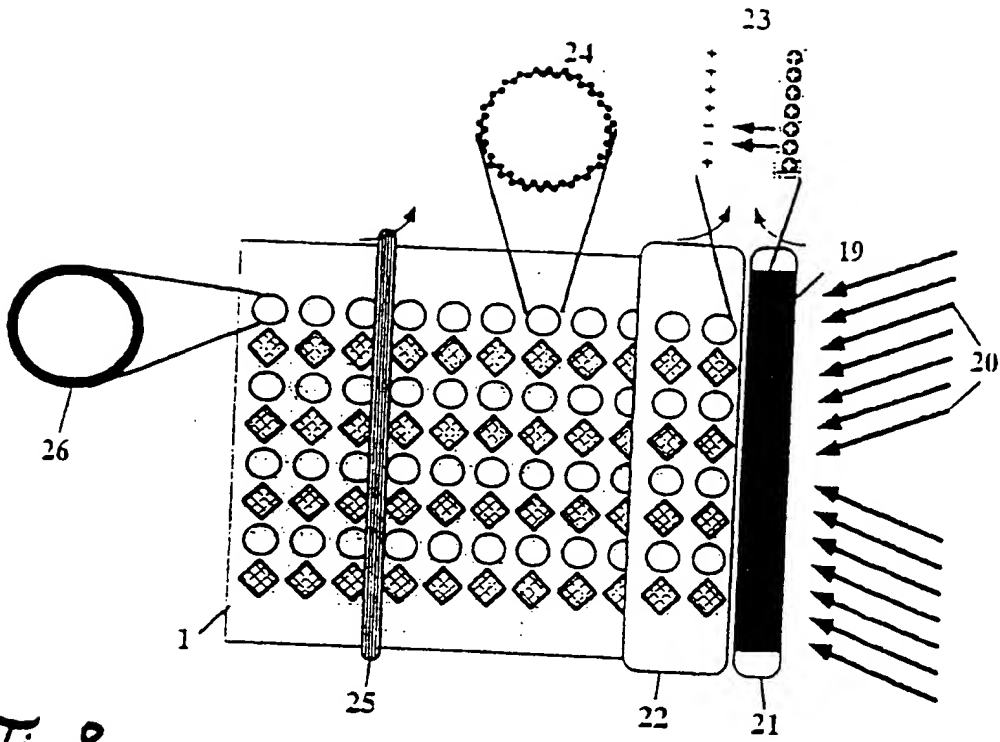


Fig. 8

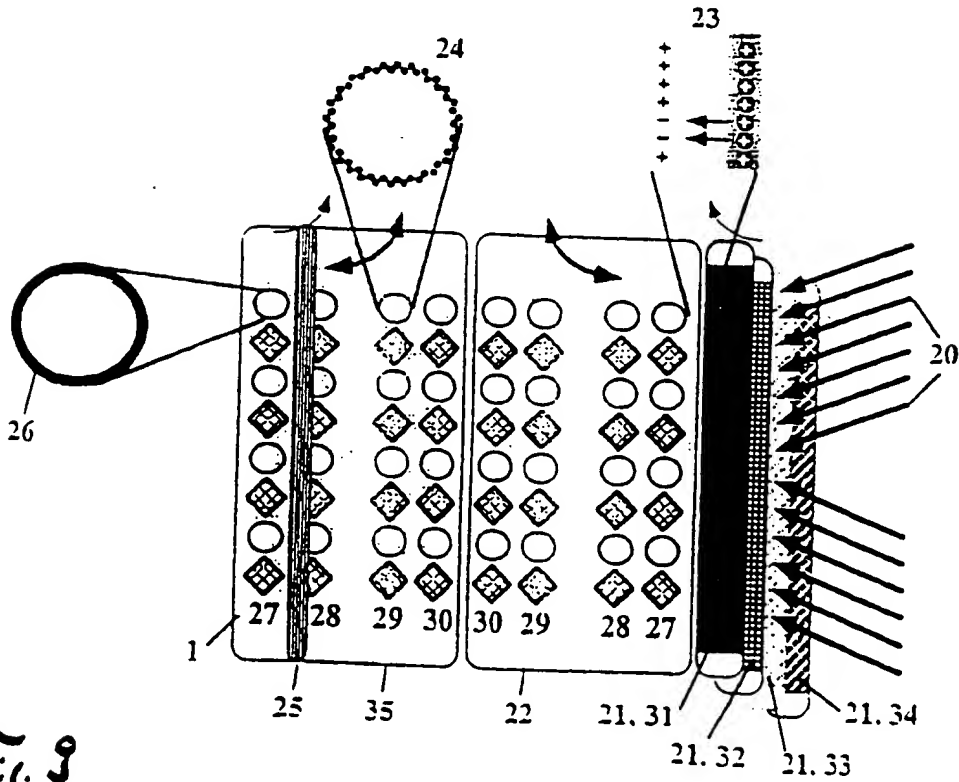
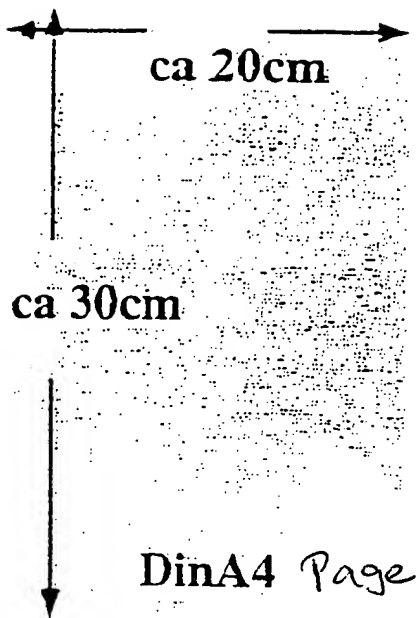


Fig. 9

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600 dpi = 600 dots per inch

600 dpi = ca 1 dot all 40 μ m

1.200 dpi = ca 1 dot all 20 μ m

2.400 dpi = ca 1 dot all 10 μ m

4.800 dpi = ca 1 dot all 5 μ m

Dots per DinA4 Page:

600 dpi = ca 5.000 x 7.500 = ca 30 millions dots

1.200 dpi = ca 10.000 x 15.000 = ca 125 millions dots

2.400 dpi = ca 20.000 x 30.000 = ca 500 millions dots

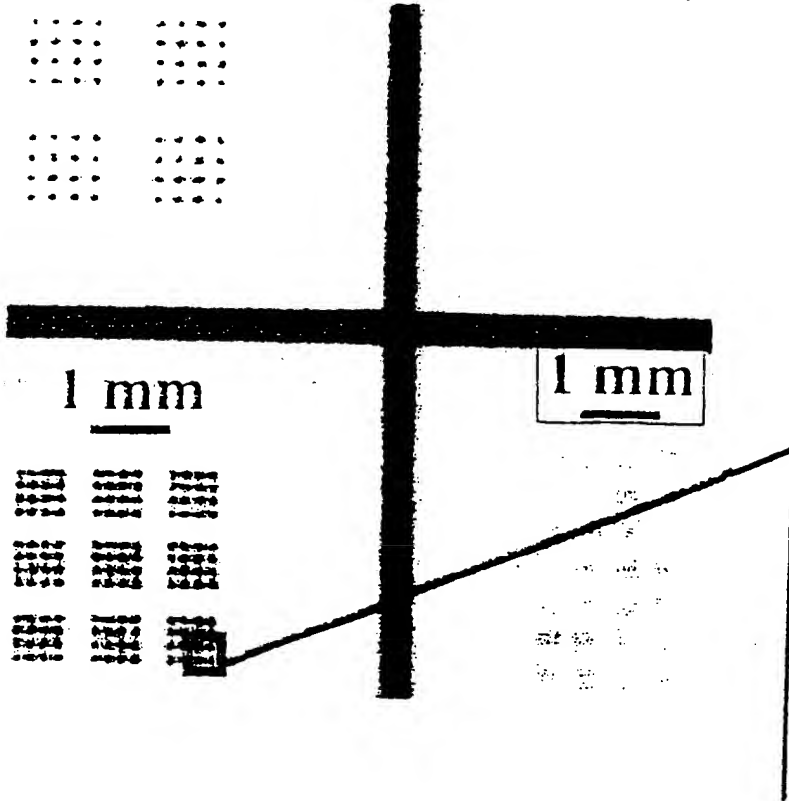
4.800 dpi = ca 40.000 x 60.000 = ca 2 milliards dots

Fig. 10

FOE F 90" 88903860

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Laser Printer with 600dpi



Scanner

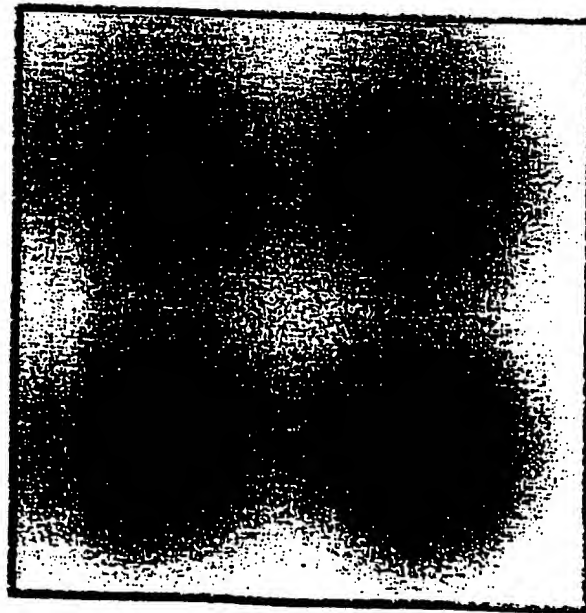
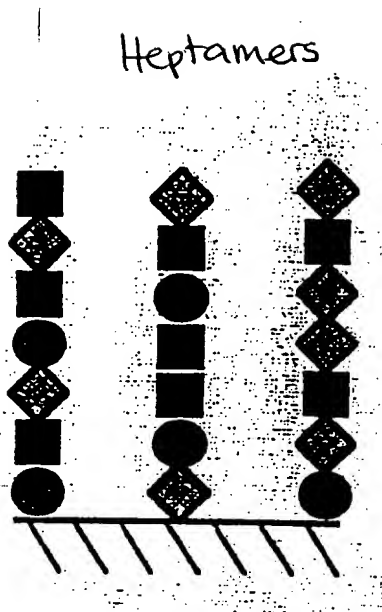


Fig. 11

50 μm

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$20^1 = 20$ different amino acids

$20^2 = 400$ different dipeptides

$20^3 = 8.000$ different tripeptides

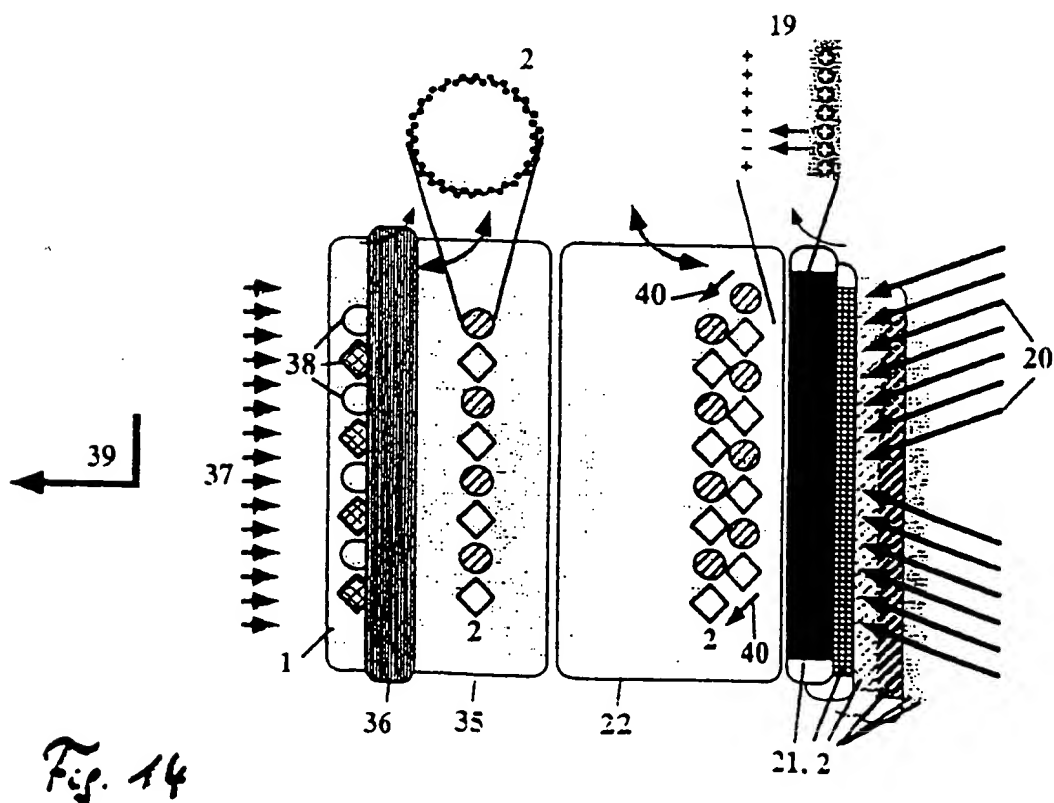
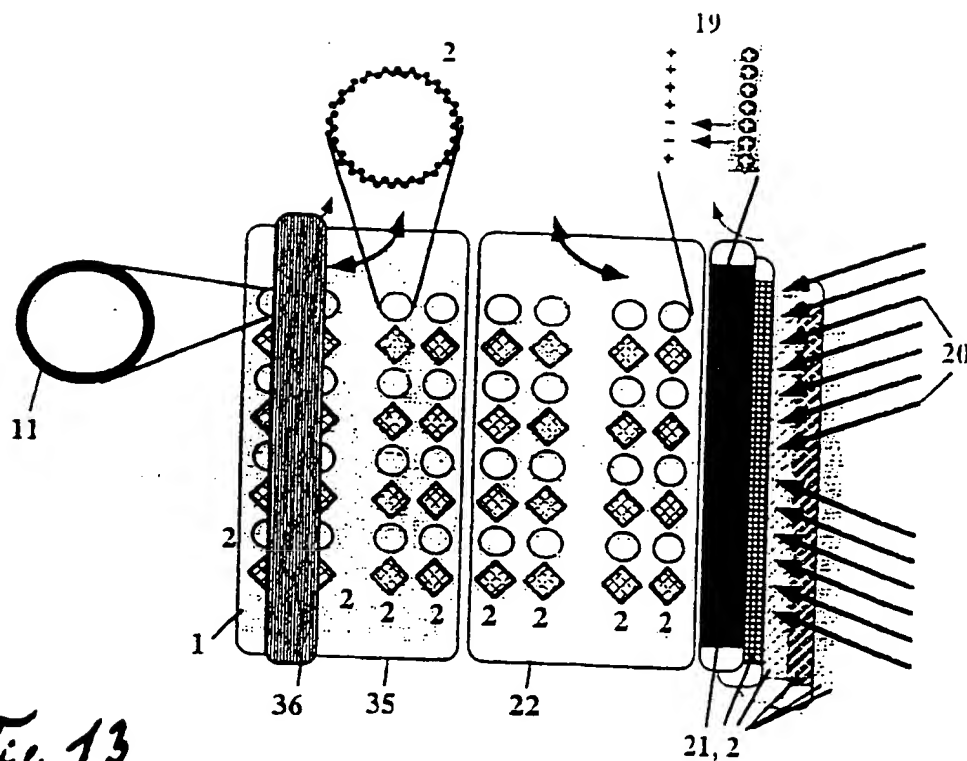
$20^4 = 160.000$ different tetrapeptides

$20^5 = 3,2$ millions different pentapeptides

$20^6 = 64$ millions different hexapeptides

$20^7 = 1.280$ millions different heptapeptides

Fig. 12



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complete tripeptide library:

$$= 20^3 = 8.000 \text{ different peptide}$$



complete tetrapeptide library:

$$= 20^4 = 160.000 \text{ different peptide}$$



complete pentapeptide library:

$$= 20^5 = 3,2 \text{ millions different peptide}$$



complete hexapeptide library:

$$= 20^6 = 64 \text{ millions different peptide}$$

N = set amino acid position

X = Mixture of 20 different amino acid

Fig. 15

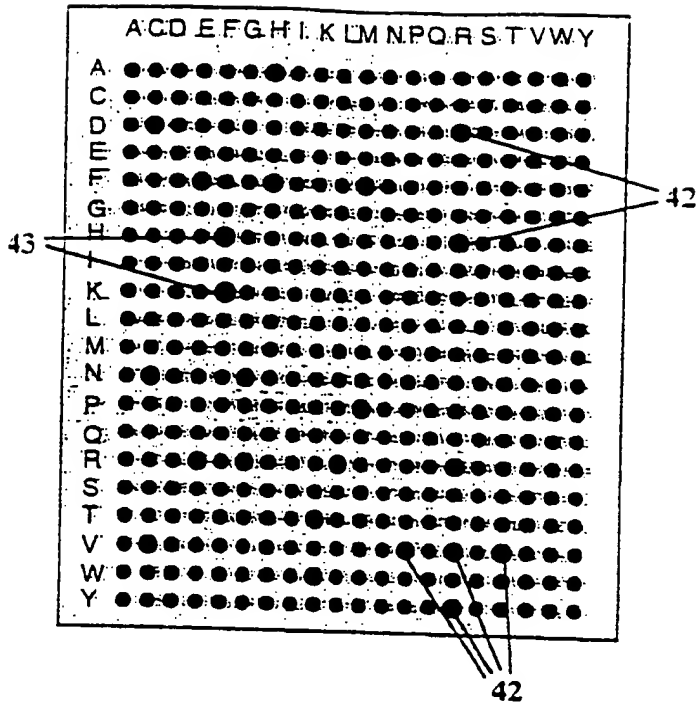


Fig. 16

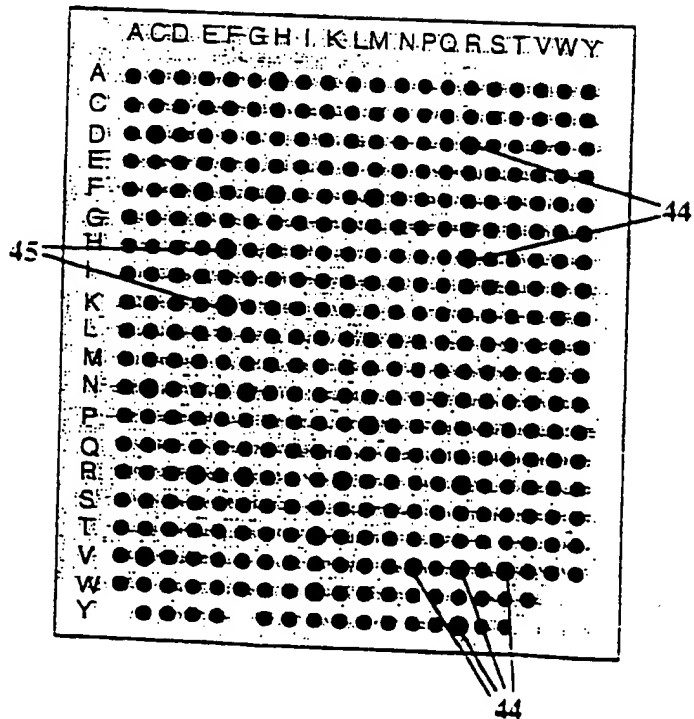
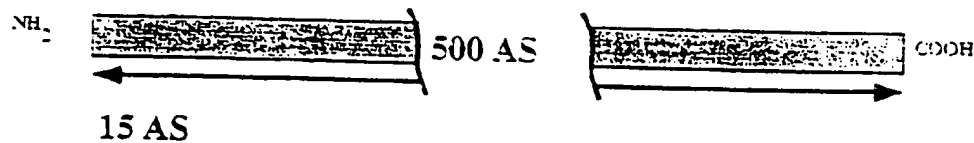


Fig. 18

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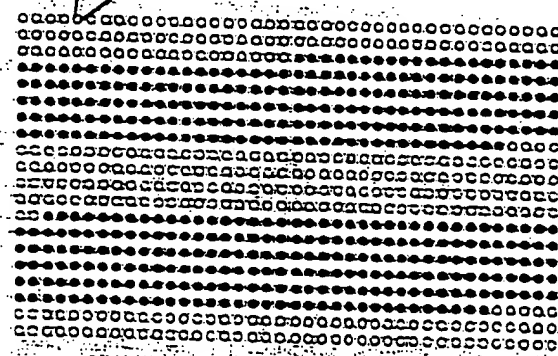
Gene1

Gene2

Gene3

Gene4

Gene5

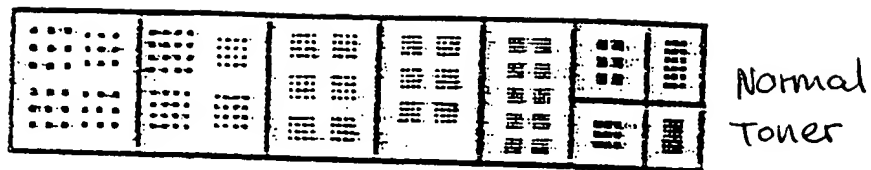


Required peptides per Gene (ca 500 AS):
= ca 100 x 15mere (per 5 AS added)

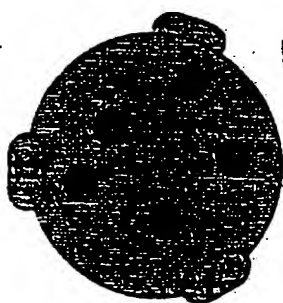
Number of human Genes:
= ca 100.000

Required peptides to cover all Genes:
= 100 x 100.000 = ca 10 millions

Fig. 17



fmoc-
amino
acid



Magnetite

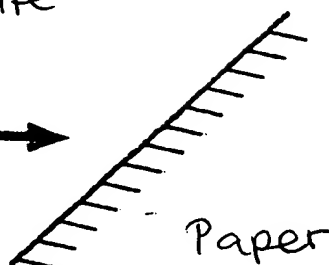


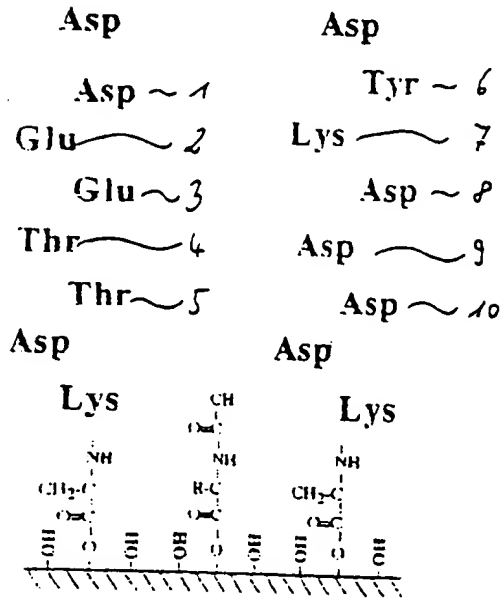
Fig. 19

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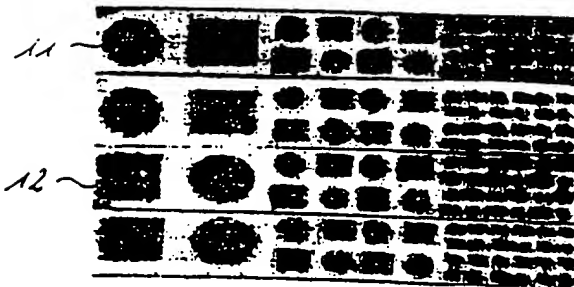
A

synthetic peptides



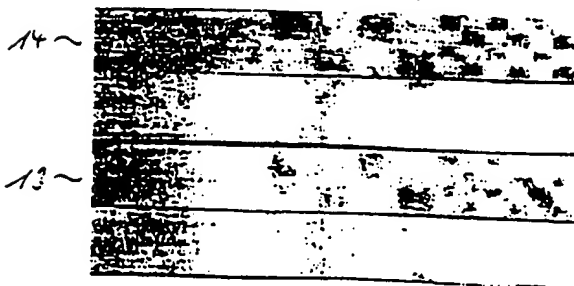
B

Front side



anti-FLAG antibody
anti-Aktin antibody
anti-FLAG antibody
anti-Aktin antibody

Back side



anti-FLAG antibody
anti-Aktin antibody
anti-FLAG antibody
anti-Aktin antibody

Fig. 20

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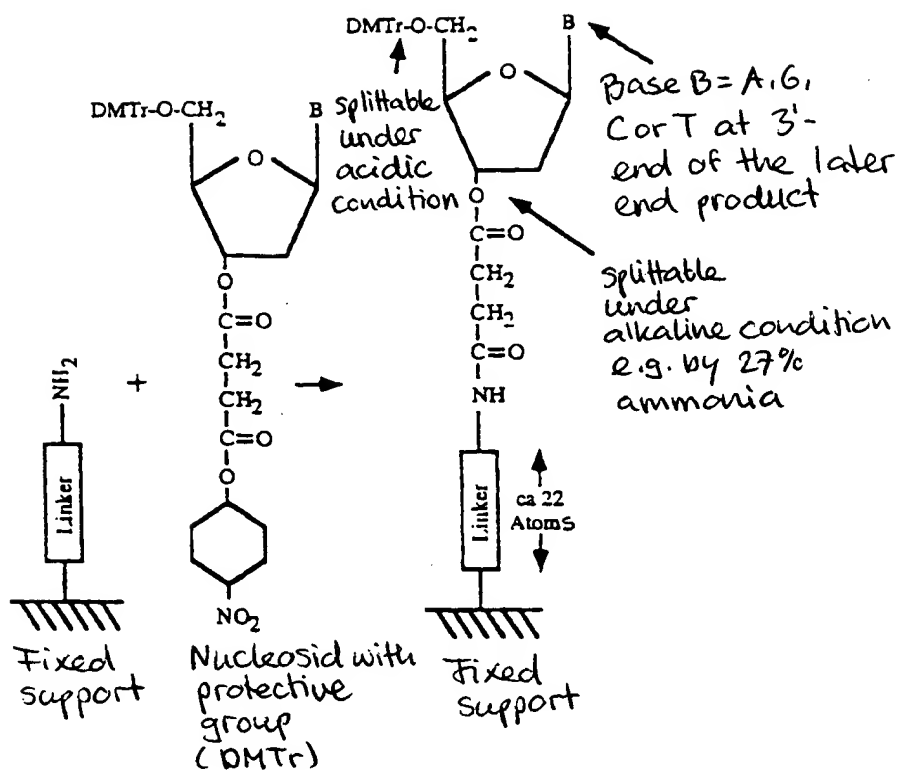
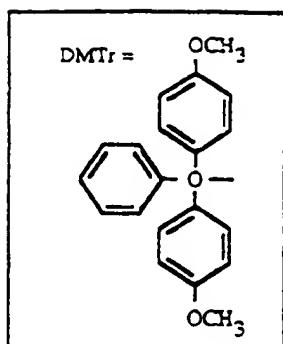
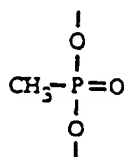
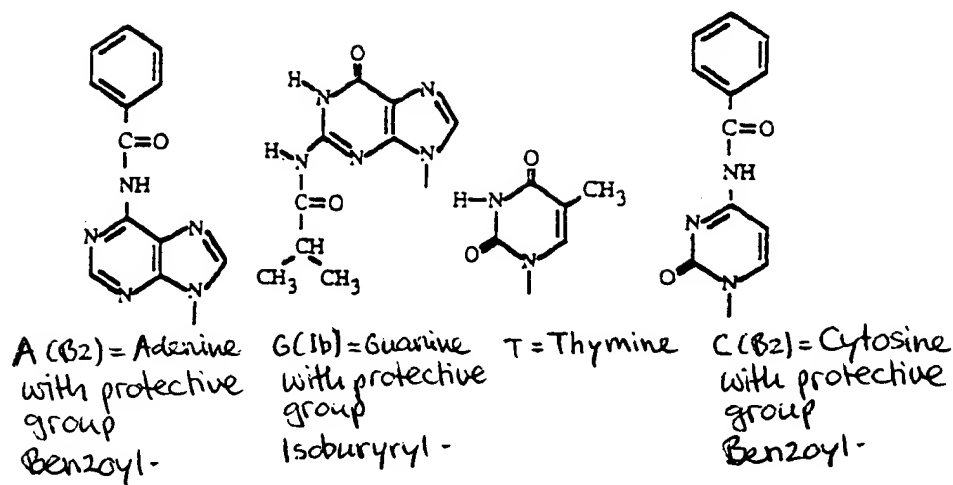
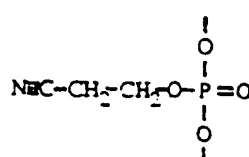


Fig. 21



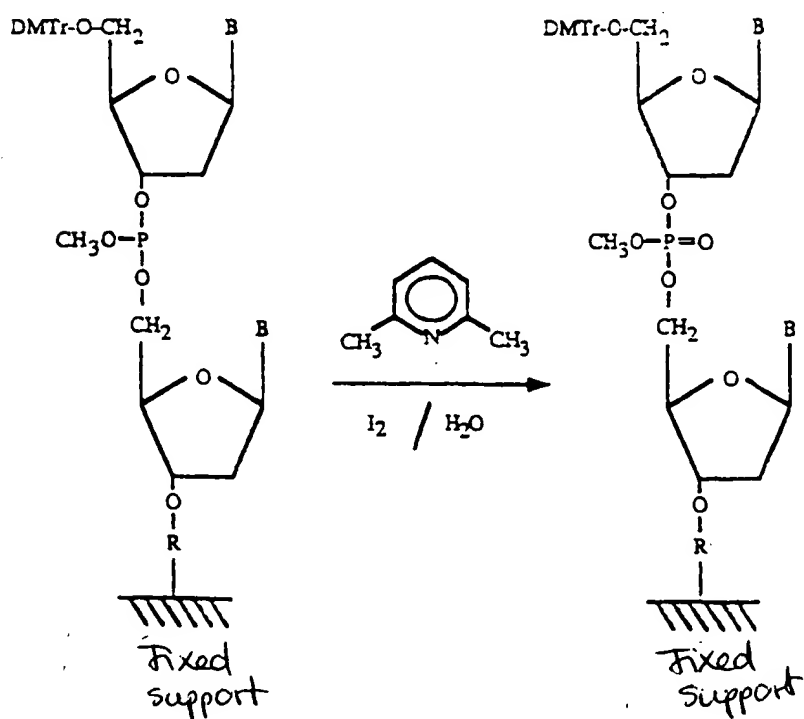
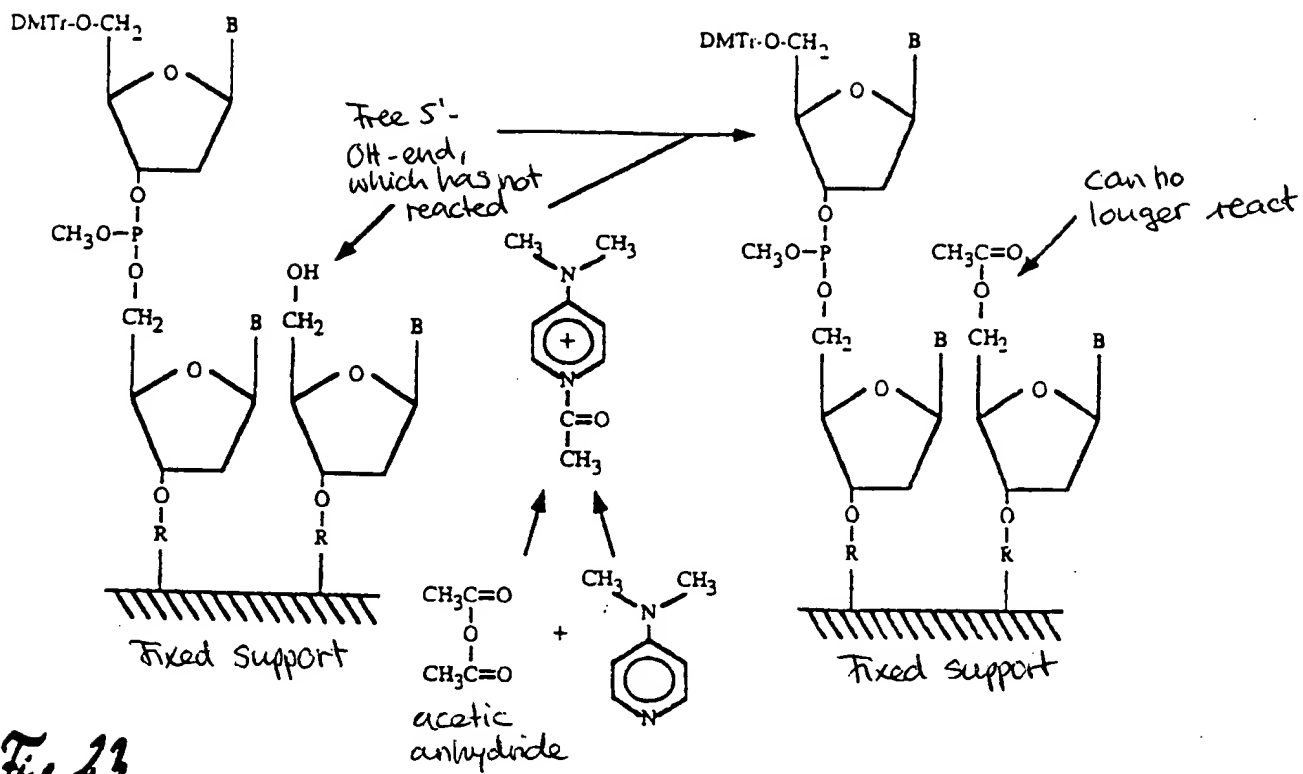
Phosphorus group with protective group Methoxy-



Phosphorus group with protective group Beta-cyanoethyl

Fig. 22

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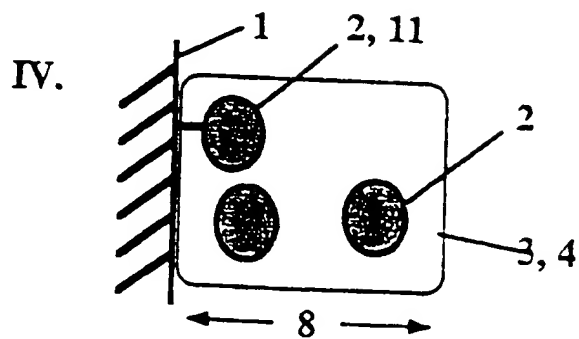
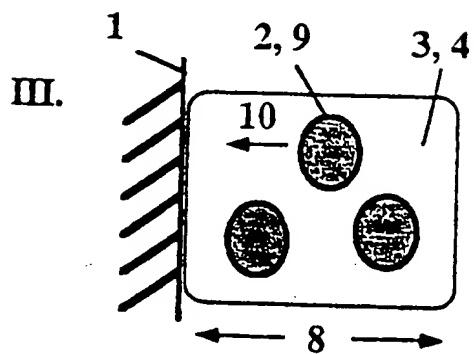
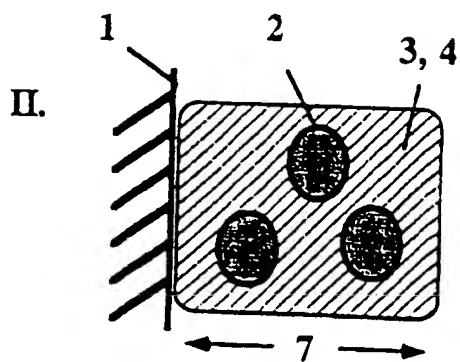
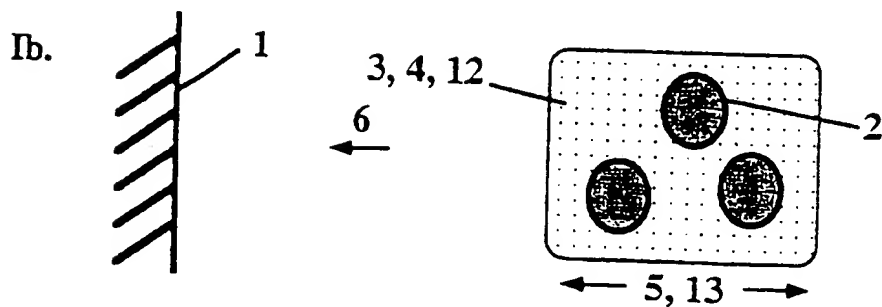
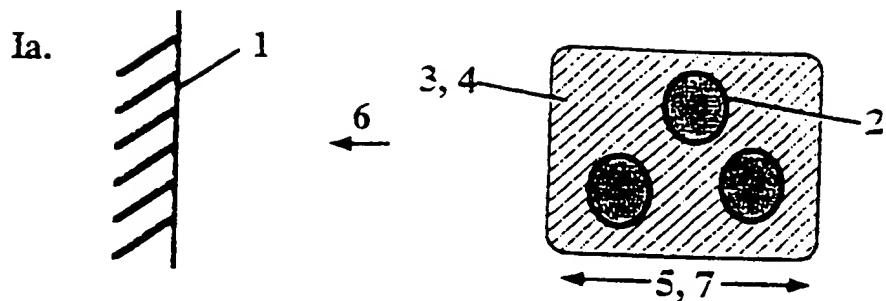


Fig. 25